

Machine Disassembly and Replacement

This chapter contains step-by-step procedures on how to disassemble the notebook for maintenance and troubleshooting. Here, we take an Aspire 5110 as sample for disassembly.

To disassemble the computer, you need the tools below:

- Wrist ground strap and conductive mat for preventing electrostatic discharge
- Small Philips screw driver
- Flat head screw driver
- Hexagonal driver
- Tweezers

NOTE: The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatch when putting back the components. When you remove the stripe cover, please be careful not to scrape the cover.

General Information

Before You Begin

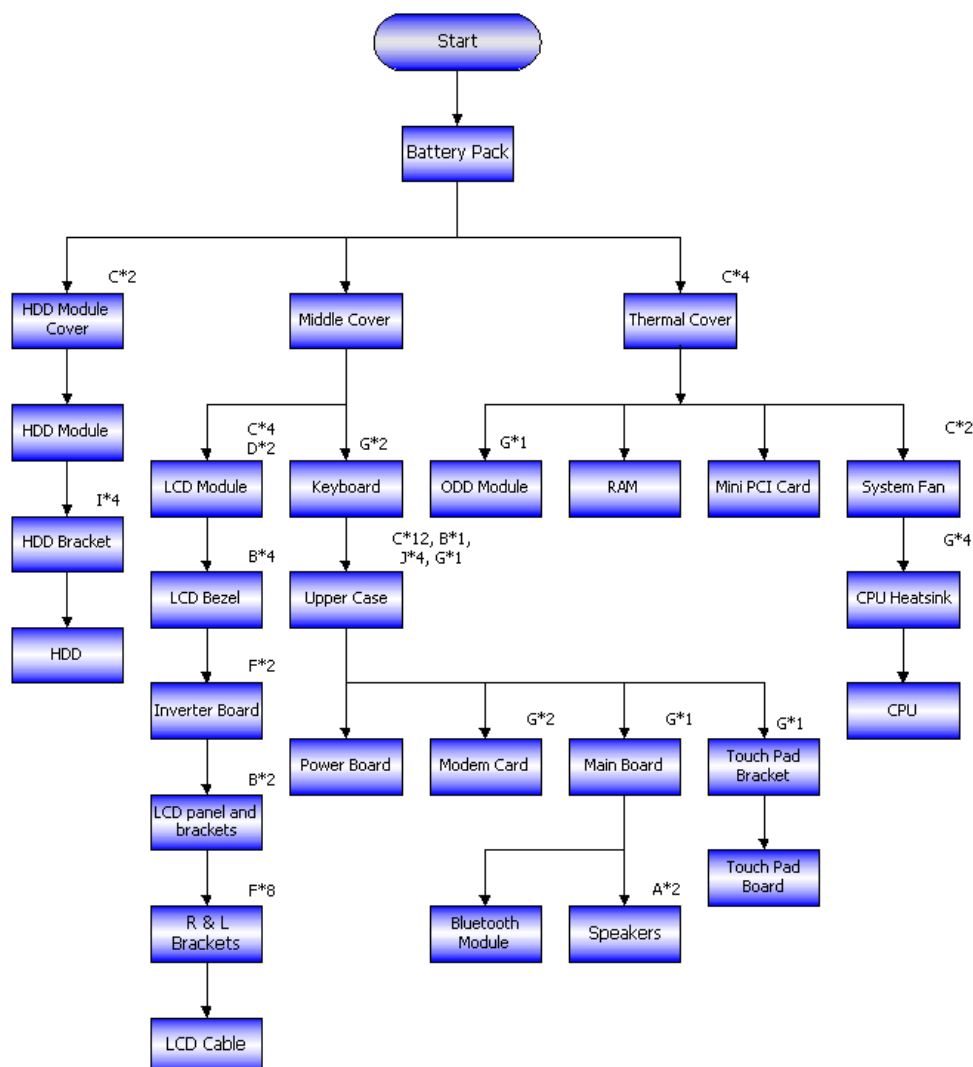
Before proceeding with the disassembly procedure, you have to make sure that:

1. The system and all peripherals are powered off.
2. The AC adaptor and all power and signal cables from the system are unplugged.
3. The battery pack is removed.

NOTE: There are several types of screws used to secure the main unit. The screws vary in length. Please refer to the screws table after the flowchart. Group the same type of screws together during service disassembling. Please also remember the screw location for each screw type. If you fasten the screws on the wrong location, the long screws may cause irrecoverable damage to the main board.

Disassembly Procedure Flowchart

The flowchart gives you a graphic representation on the entire disassembly and reassembly and instructs you how to remove the components.



Screws List

No.	Description	Part No.
a	SCREW M2.5*3(NL)	86.AD WV5.001
b	SCREW M2.5*6(NL)	86.AD WV5.002
c	SCREW M2.5*10(NL)	86.AD WV5.003
d	SCREW M2.5*15(NL)	86.AD WV5.004
e	SCREW M2*2.2	86.AD WV5.005
f	SCREW M2*3-B (NL)	86.AD WV5.006
g	SCREW M2*3-S (NL)	86.AD WV5.007
h	SCREW M2*4	86.AD WV5.008
i	SCREW M3*4 (NL)	86.AD WV5.009

Screws List

No.	Description	Part No.
j	SCREW D-SUB 4#X40*1/5-NI (NL)	86.AD WV5.010

Disassembly Procedure

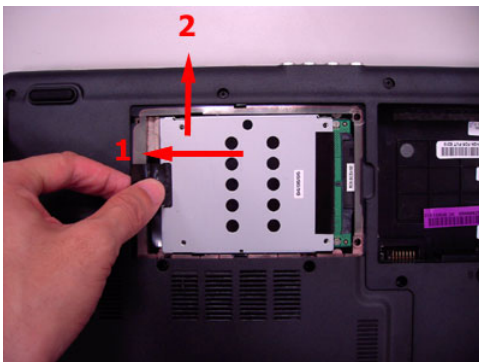
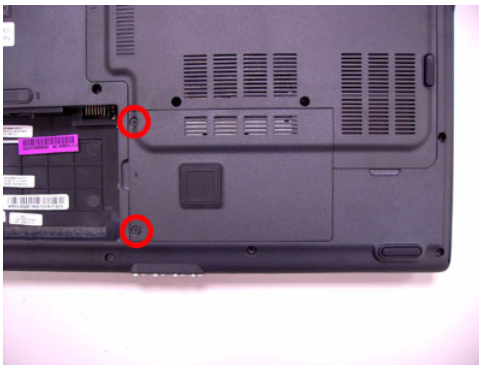
Removing the Battery Pack

1. Slide the battery lock to the end as the arrow indicates.
2. The battery pack will pop up then remove it.



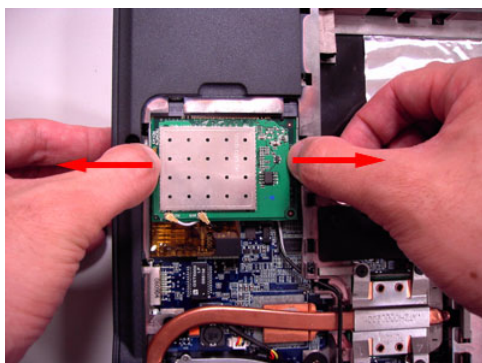
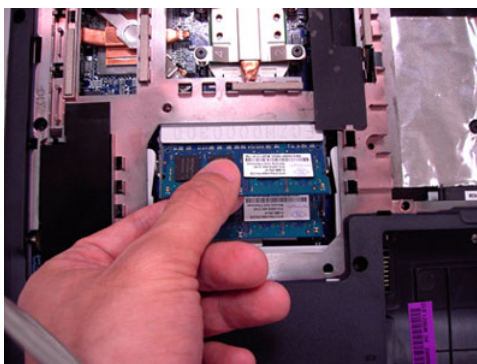
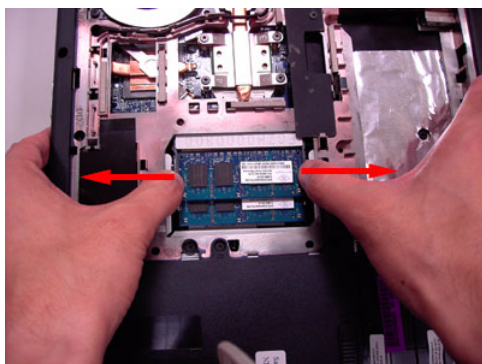
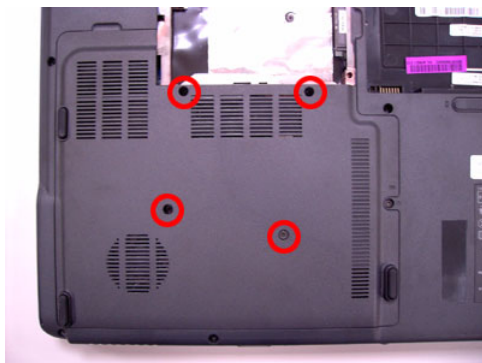
Removing the HDD Module

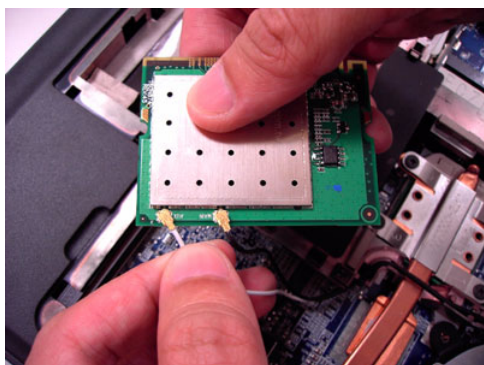
1. Release the two screws fastening the HDD module cover.
2. Detach the HDD module cover.
3. Pull the HDD module then lift the HDD module as the arrow indicates then detach the HDD module.



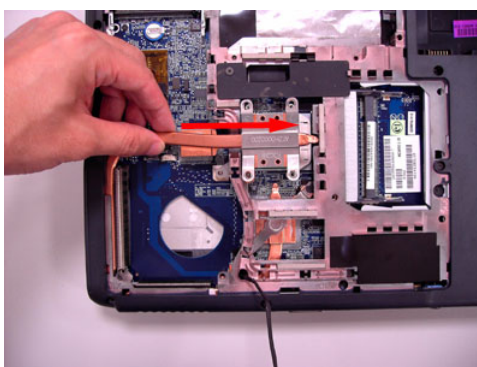
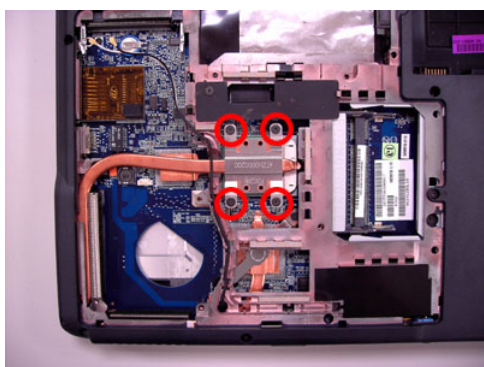
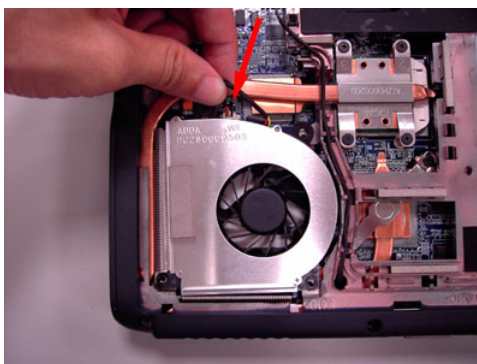
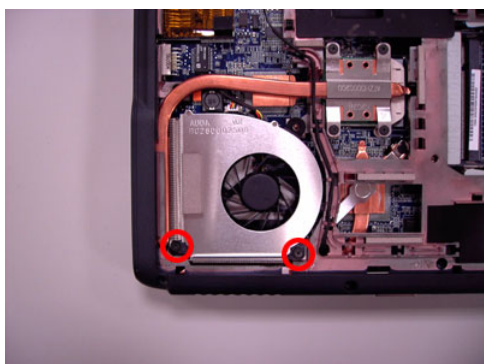
Removing the RAM Module/Mini PCI Card/Thermal Module/CPU

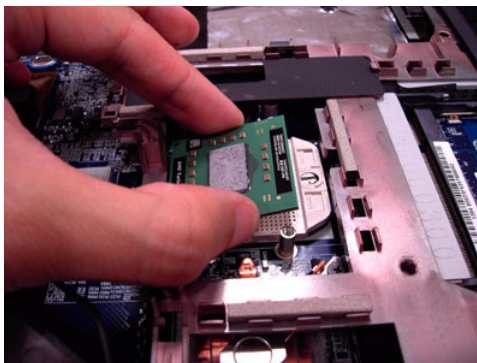
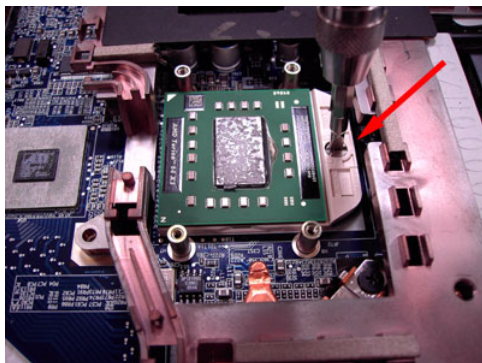
1. Release the four screws holding the thermal module cover.
2. Remove the thermal module cover.
3. Pull the RAM module locks at the same time as the arrows indicate.
4. The RAM module will pop up then detach it. Repeat the anterior step to remove another RAM module.
5. Pull the Mini PCI card locks at the same time as the arrows indicate.
6. The Mini PCI card will pop up then detach it.
7. Disconnect the auxiliary antenna cable (gray) and the main antenna cable (black).





8. Release the two screws securing the system fan.
9. Disconnect the system fan cable carefully the remove the system fan.
10. Release the four screws securing the CPU heatsink.
11. Remove the CPU heatsink as the arrow indicates.
12. Counter clockwise release the screw securing the CPU using a flat head screw driver.
13. Carefully detach the CPU.

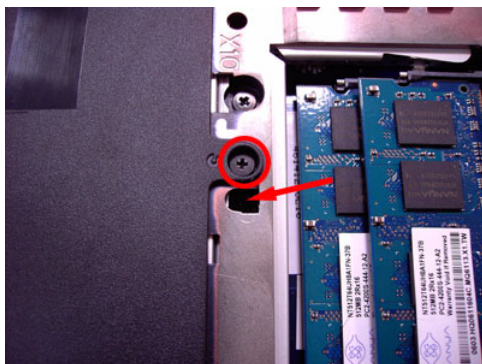




Removing the ODD Module

If you just want to replace the ODD module, you do not have to remove the anterior components. Please skip the anterior steps of disassembly. After you remove the battery pack and the thermal module cover, follow the steps below.

1. Release the screw securing the ODD module.
2. Push the ODD module using a screwdriver as shown.
3. Remove the ODD module from the main unit.



Removing the LCD Module from the Main Unit

If you just want to replace or check the LCD module, you can skip all the main unit disassembly procedures. After removing the battery pack, please follow the steps below.

1. Open the notebook as shown.
2. Remove the middle cover from the edge of the middle cover.
3. Carefully detach the middle cover.
4. Carefully disconnect the LCD cable.
5. Slightly pull out the wireless antenna cables.



6. Release the two screws holding the LCD module on the bottom side of the main unit.
7. Release the four screws securing the LCD hinges on the main unit.
8. Then detach the LCD module from the main unit.

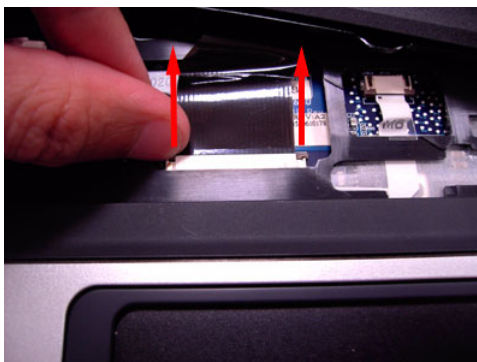


Removing the Keyboard

If you just want to replace the keyboard, skip the LCD module disassembly. After you remove the middle cover, follow the steps below.

1. Release the two screws securing the keyboard plate.
2. Carefully detach the keyboard plate from the edge of the keyboard plate and place the keyboard plate as shown.
3. Release the keyboard FFC lock carefully because it is fragile. Then remove the keyboard plate.

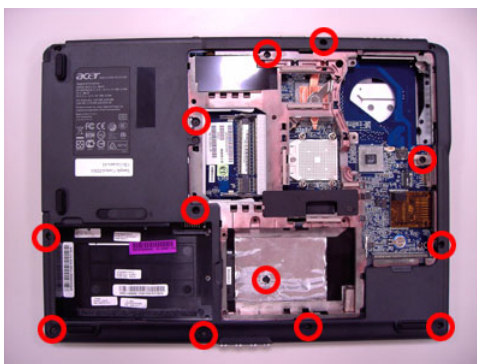
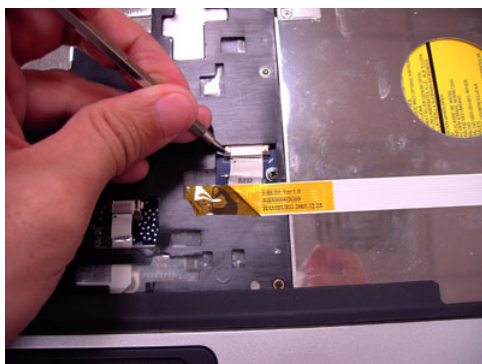




Disassembling the Main Unit

Separating the Upper Case and the Lower Case

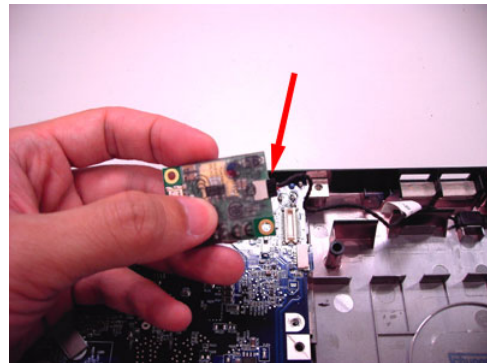
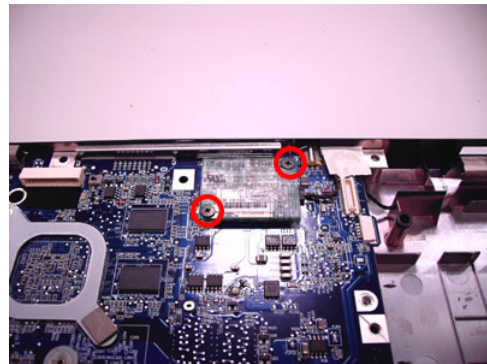
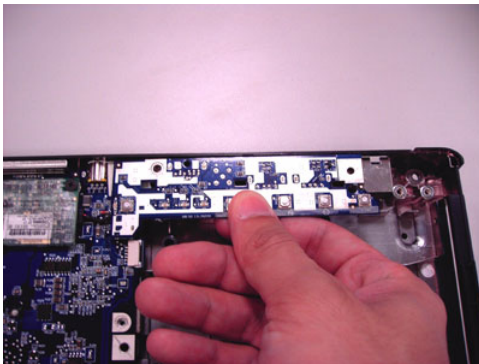
1. Carefully release the media board FFC lock because it is fragile. Then disconnect the media board FFC.
2. Release the 12 screws securing the upper case and the lower case on the bottom side.
3. Release the four hexagonal screws securing the external VGA port and the DVI-D port.
4. Release the two screws securing the upper case and the lower case on the upper side.
5. Then detach the upper case from the main unit.





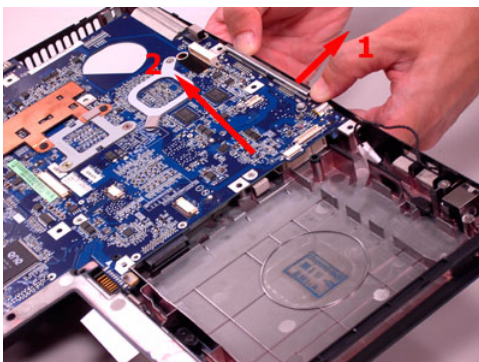
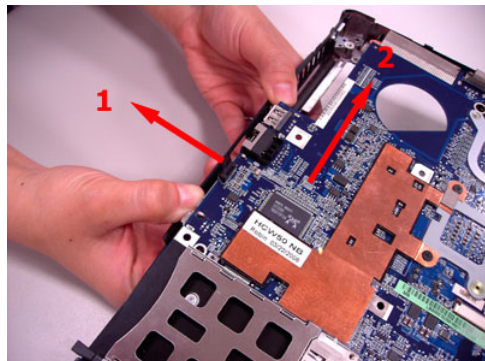
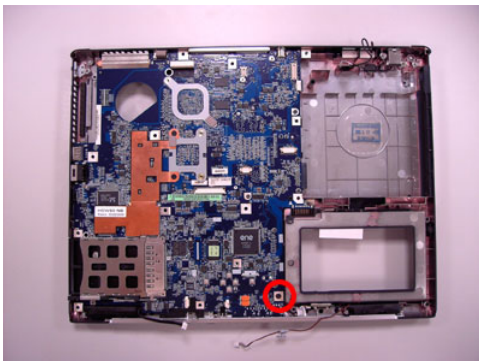
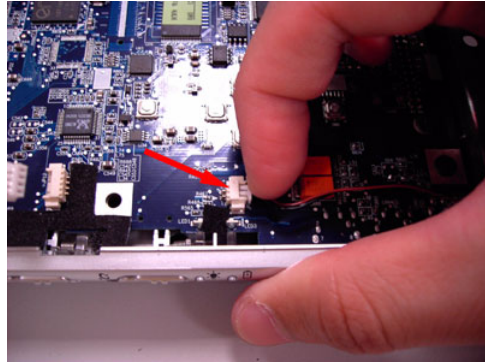
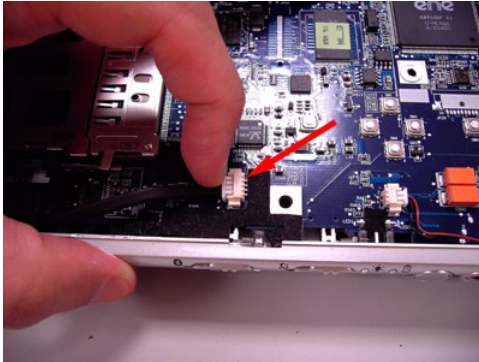
Removing the Power Board and the Modem Board

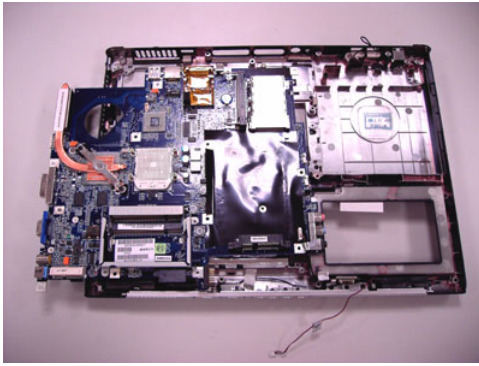
1. Detach the power board slightly.
1. Release the two screws securing the modem board.
2. Detach the modem board then disconnect the modem board cable.



Removing the Main Board

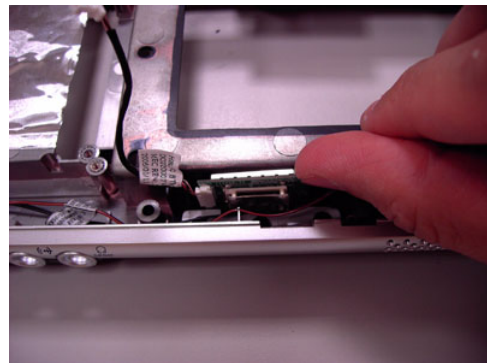
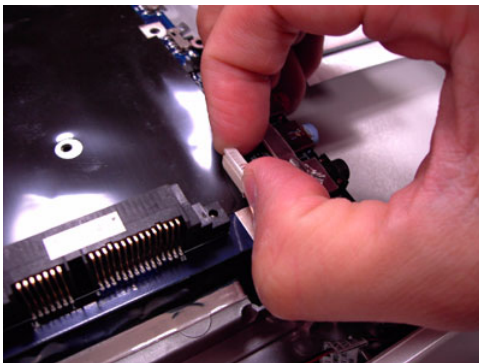
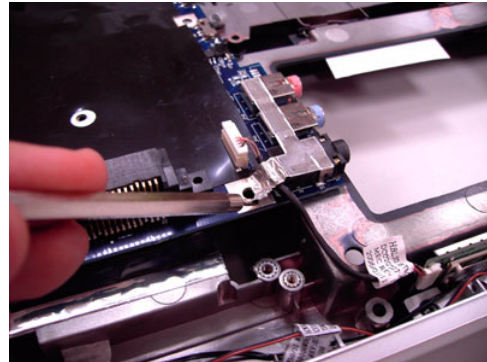
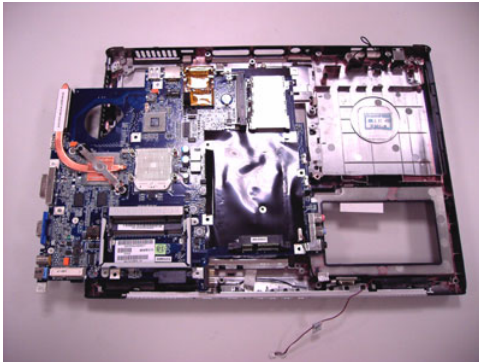
1. Disconnect the speakers cable and the microphone cable.
2. Release the screw securing the main board.
3. Slightly pull the edge of the lower case from the left side and at the same time push the main board on the bottom side to pop up the main board.
4. Repeat Step 3 from the rear side.
5. Then detach the main board. If your system is equipped with Bluetooth module, please place the main board on the lower case as shown. Do not abruptly remove the main board from the lower case.





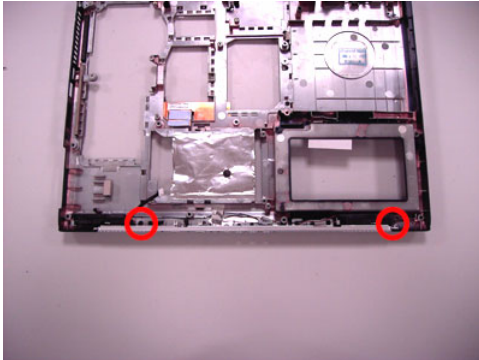
Removing the Bluetooth Module

1. Place the main board as shown.
2. Tear off the tinsel.
3. Disconnect the Bluetooth module cable and remove the main board.
4. Remove the Bluetooth module.



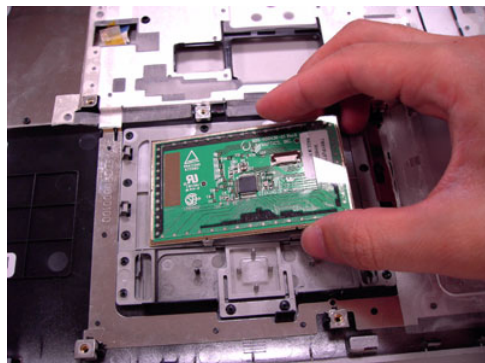
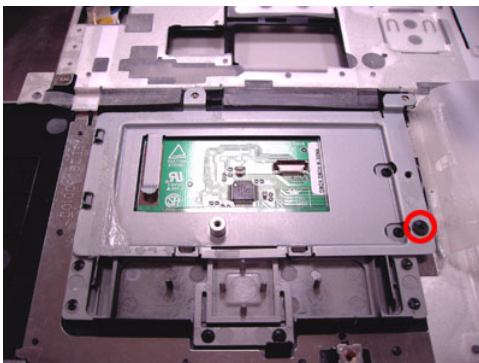
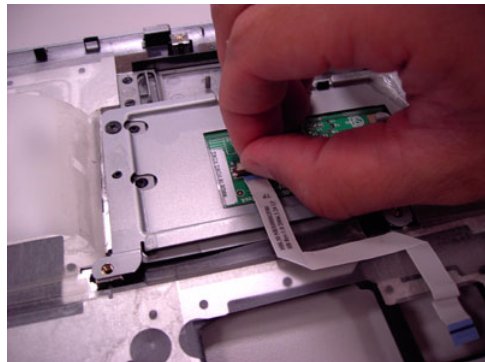
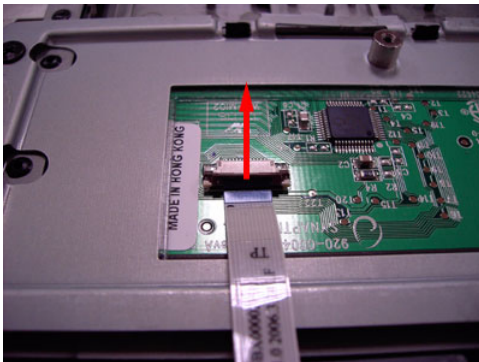
Removing the Speakers

1. Release the two screws securing the speakers.
2. Then detach the speakers.



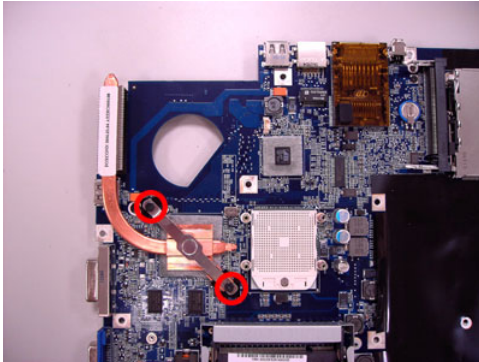
Removing the Touch Pad Board

1. Slightly unlock the touch pad FFC lock by nail and disconnect the touch pad FFC.
2. Release the screw holding the touch pad board bracket then remove the touch pad board bracket.
3. Detach the touch pad board.



Removing the VGA Heatsink

1. Release the two screws securing the VGA heatsink.
2. Then detach the VGA heatsink.

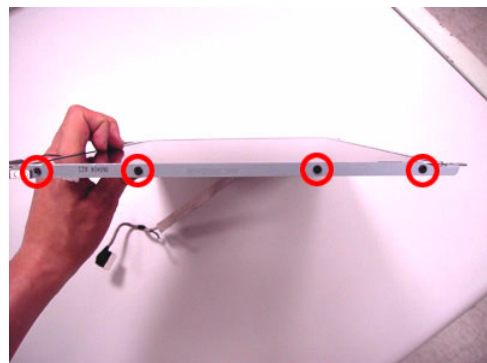
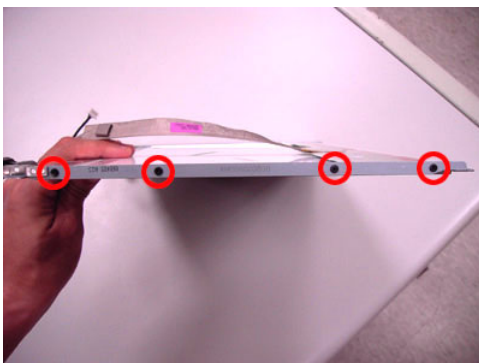
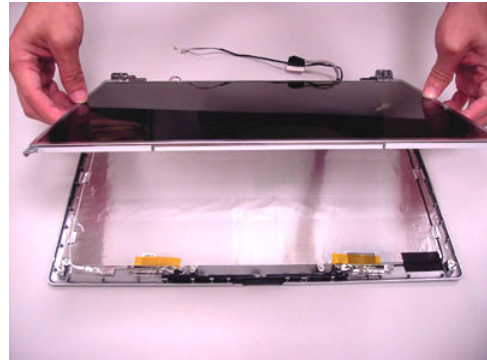
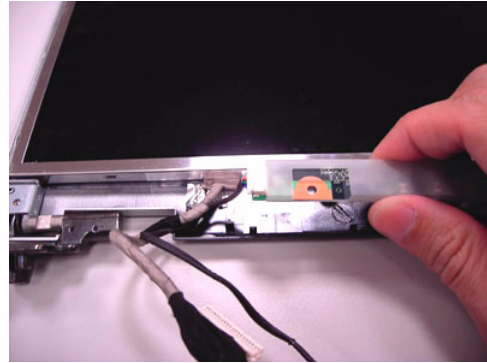
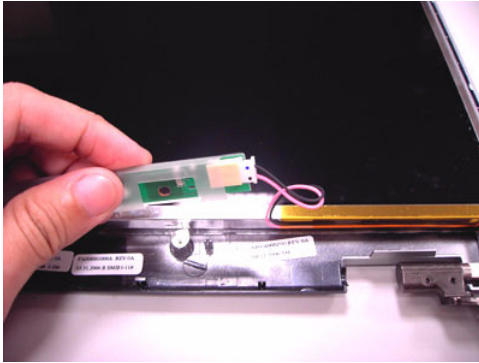


Disassembling the LCD Module

1. Remove the four screw cushions on the LCD bezel then release the four screws holding the LCD bezel.
2. Carefully detach the LCD bezel from the LCD module.
3. Tear off the tapes holding the LVDS cable and the LCD cable then release the two screws securing the inverter board.



4. Carefully disconnect the LVDS cable.
5. Carefully disconnect the LCD cable then remove the inverter board.
6. Release the two screws securing the LCD panel.
7. Then detach the LCD panel.
8. Release the eight screws holding the left and right LCD brackets and remove the LCD brackets.



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9. Tear off the tape holding the LCD cable.
 10. Carefully pull and disconnect the LCD cable.

